

DETAILED ACTION

This action is in response to arguments submitted on October 4, 2011.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 7, 9, 10, 13, 18, 19, 21, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser et al. (US 6,592,624) in view of Hamada (US Patent 6,425,920).

Regarding Claims 1, 4, 9, and 19, Fraser et al. discloses an intervertebral spacer (Figure 1) that is porous (Column 5, lines 55-56) with a beveled edge (see Figures 1 and 2), an upper portion including an upper surface (Figure 2, 42) and a lower portion including a lower surface (Figure 2, 46) where the upper and lower surfaces are displaced from each other a maximum distance along a first axis. Fraser further discloses a central trunk separating the upper and lower portions (16) where an upper relative angle designation mark (Figure 4, 20) is formed on the upper portion and a lower relative angle designation mark (Figure 4, 21) is formed on the lower portion, the upper and lower relative angle designation marks being separated by the central trunk and formed along the first axis so that the upper and lower relative angle designation

marks are visible when the spacer is attached to an insertion tool. Please note: it appears that the relative angle designation marks would still be visible with a tool engaged; however, the tool is not positively recited, so it would depend upon the tool being used. Fraser et al. does not show or specify a specific tool for insertion, and the implant may be inserted in multiple directions (Column 7, lines 3-6). Fraser teaches an upper radial flange (Figure 4, 54) disposed between the upper surface and the annular groove, and a lower radial flange (56) disposed between the lower surface and the annular groove.

Fraser fails to disclose a central bore formed through the upper and lower surfaces, at least one of the upper and lower surfaces having a center that is substantially flat, the central bore formed through at least a portion of the center. However, Hamada teaches a spacer body central bore (707) passing through the upper (703) and lower (705) surfaces where both of the surfaces are substantially flat, and the upper and lower surfaces diametrically tapered (as seen in Figure 60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the invention of Fraser with the central bore as taught by Hamada in order to provide an area for osteogenic materials to be placed to provide for improved ingrowth and stability of the implant once placed.

Regarding Claims 2, 7, and 10, Fraser discloses the upper and lower surfaces of the spacer body diametrically tapered (Figure 7).

Regarding Claims 6 and 13, Fraser discloses the annular groove as tapered (Figure 6).

Regarding Claims 18 and 21, Fraser discloses the relative angle designation marks extending from a wall of the annular groove to either the upper or lower surface (Figure 6).

Regarding Claims 24-26, Fraser discloses that the upper and lower relative angle designation marks are grooves (Figures 5 and 6).

Response to Arguments

Applicant's arguments filed October 4, 2011 have been fully considered but they are not persuasive. The insertion tool used is not positively recited, and therefore visibility of the angle designation marks of Frasier would depend on the tool which is used with Frasier. Additionally, it is not claimed that the angle designation marks are simultaneously visible when attached to the insertion tool, and so the insert could be rotated to visualize the angle designation marks (as seen where tool is attached), nor is it claimed that they are visible during implantation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE L. NELSON whose telephone number is (571)270-5368. The examiner can normally be reached on Monday through Friday 8:30-5:00, first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, ***please contact the examiner's supervisor, SPE, at (571) 272-4746.*** The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If there are any inquiries that are not being addressed by first contacting the Examiner or the Supervisor, you may send an email inquiry to
TC3700_Workgroup_D_Inquiries@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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